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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

VALENTI, ANDREA M

ART UNIT PAPER NUMBER

3643

DATE MAILED: 03/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/786,695

Applicant(s)

DULANEY, NEAL

Examiner

Andrea M. Valenti

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 January 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 21-29 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Applicant's election without traverse of claims 1-20 in the reply filed on 06 January 2005 is acknowledged.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 13-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 13 recites the limitation "the at least one opening" in lines 2-3. There is insufficient antecedent basis for this limitation in the claim.

Claims 14 and 15 are rejected as being dependent upon a rejected base claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-11, 13, 16-20 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,659,043 to Huska.

Regarding Claims 1 and 18, Huska teaches a modular water flow system for an aquarium comprising: a pump (Huska Col. 1 line 59-60 and Col. 4 line 30-34); a water intake system (Huska #18) having at least one inlet wherein the intake system pulls water in through the inlet due to a propulsive force created by the pump; a water return system (Huska #46) having at least one outlet wherein the return system permits the water to return to the aquarium (Huska #14) from the outlet, and at least one valve (Huska #21) assembly to manage at least one of the water return system and the water intake system to regulate a flow rate.

Regarding Claims 2 and 3, Huska teaches wherein the water intake system, the water return system, and the at least one valve assembly are coupled by at least one connecting piece which is least one of the following: a coupling bracket, a tee bracket, and an elbow bracket (Please see attached Fig. 1 element between element #21 and #41 and also element #45).

Regarding Claims 4 and 5, Huska teaches wherein the at least one connecting piece is coupled to an attachment mechanism, wherein the attachment mechanism is a suction cup (Huska #44).

Regarding Claims 6 and 19, Huska teaches comprising an overall assembly unit which couples an interior portion (Huska #18 and 45) of the modular water flow system to an exterior portion (Huska #28, #42 and the pipe attached to element #42 and 45) of the modular water flow system via a link (Huska pipe element between #28 and 45).

Regarding Claim 7, Huska teaches wherein the link comprises an inlet port (Huska at element #28) and an outlet port (Huska at element #45).

Regarding Claims 9 and 20, Huska inherently teaches wherein the outlet port is rotatably coupled to the interior portion of the modular water flow system (Huska at the point where the link meets element #45).

Regarding Claim 10, Huska teaches wherein the valve assembly comprises one or more opening, and a regulator which regulates the rate at which the water returns (Huska #42 or #52).

Regarding Claim 11, Huska teaches wherein the regulator comprises an adjustment mechanism to alter the rate at which the water returns (Huska Fig. 4 illustrates that the valves have knobs #21 and 27).

Regarding Claim 13, Huska teaches wherein the at least one valve assembly comprises at least one attachment (Huska #45) that fastens to the at least one opening.

Regarding Claim 16, Huska teaches wherein the water return system further comprises at least one spray bar having at least one aperture (Huska #44).

Regarding Claim 17, Huska teaches further comprising at least one pipe connected (Huska Fig. 1 pipe connected to element #17 and pipe coming out of right side of element #28) on each end by at least one connecting piece (Huska #28) and located between the water intake system and the water return system.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,659,043 to Huska.

Regarding Claim 12, Huska is silent on comprising at least one cap, which can seal at least one of the one or more openings. However, it is old and notoriously well-known in the art of plumbing to provide many connector configurations to meet certain space parameters to direct the liquid flow from an inlet to an outlet (including T-joints, elbows, etc) and it is notoriously well-known to cap the openings of these joints to provide an access for to the system to perform routing maintenance and cleaning by accessing a particular section of the system without having to disassembly the entire system. Therefore, it would have been obvious to one of ordinary skill in the art to modify the teachings of Huska at the time of the invention with an access port cap for the advantage of providing a clean out port and a port for maintenance to remove any undesirable blockage.

Claims 14 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,659,043 to Huska in view of U.S. Patent No. 6,125,791 to Gundersen et al.

Regarding Claims 14 and 15, Huska teaches an attachment (Huska #45), but is silent on the at least one attachment includes at least one of: a hyàrojet and a ball/socket assembly, wherein the ball/socket assembly comprises a number of interlocking balls and sockets that can be rotated in at least one direction to allow customizability in water flow pattern. However, Gundersen teaches an aquarium with a

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ball and socket assembly (Gundersen #62B, 65B, 62B and 64B). It would have been obvious to one of ordinary skill in the art to modify the teachings of Huska with the teachings of Gundersen at the time of the invention since the modification is merely the selection of a known alternate equivalent discharge attachment selected for the advantage of controlling the direction of the outflow for a particular aesthetic effect.

Claims 1-4, 6, 7, 9-11, 13, 14, 18-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 4,802,980 to Gilkey et al in view of U.S. Patent No. 5,054,424 to Sy.

Regarding Claims 1-4, 6, 7, 10, 11 and 18, Gilkey teaches a modular water flow system for an aquarium comprising water intake means (Gilkey #82 and 88); water return means (Gilkey #96); an attachment mechanism (Gilkey #90). Gilkey is silent on a means for adjusting water return rate. However, Sy teaches a water return rate adjusting means for an aquarium (Sy #156 and Col. 9 line 29-31). It would have been obvious to one of ordinary skill in the art to modify the teachings of Gilkey with the teachings of Sy at the time of the invention for the advantage of having a means of conducting routine maintenance and repair of the system as taught by Sy.

Regarding Claim 19, Gilkey as modified teaches further comprising: a means for removing water from an interior portion (Gilkey #88) of an aquarium to an exterior portion of the aquarium, a means for returning water to the interior portion of the aquarium from the exterior portion of the aquarium (Gilkey #96), a connection means for coupling the interior portion to the exterior portion of the aquarium (Gilkey #86 and 92).

Regarding Claims 9, 13, 14 and 20, Gilkey as modified teaches further comprising means for swiveling the connection means (Gilkey #94) to facilitate positioning of the system.

Claims 1-8, 10, 11, 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,080,304 to Gomi in view of U.S. Patent No. 5,054,424 to Sy.

Regarding Claims 1, 10, 11, and 18, Gomi as modified teaches a modular water flow system for an aquarium comprising: a pump (Gomi #3); a water intake system (Gomi #31) having at least one inlet wherein the intake system pulls water in through the inlet due to a propulsive force created by the pump; a water return system (Gomi #17) having at least one outlet wherein the return system permits the water to return to the aquarium (Gomi element A) from the outlet.

Gomi is silent on at least one valve assembly to manage at least one of the water return system and the water intake system to regulate a flow rate. However, Sy teaches a valve assembly to regulate the flow rate of the water return system (Sy #156 and Col. 9 line 29-31). It would have been obvious to one of ordinary skill in the art to modify the teachings of Gomi with the teachings of Sy at the time of the invention for the advantage of having a means of conducting routine maintenance and repair of the system as taught by Sy.

Regarding Claims 2 and 3, Gomi as modified teaches wherein the water intake system, the water return system, and the at least one valve assembly are coupled by at

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least one connecting piece which is least one of the following: a coupling bracket, a tee bracket, and an elbow bracket (Gomi #18 and 17).

Regarding Claims 4 and 5, Gomi as modified teaches wherein the at least one connecting piece is coupled to an attachment mechanism, wherein the attachment mechanism is a suction cup (Gomi #7).

Regarding Claims 6 and 19, Gomi as modified teaches comprising an overall assembly unit which couples an interior portion (Gomi fig. 7) of the modular water flow system to an exterior portion of the modular water flow system via a link (Gomi #2).

Regarding Claim 7, Gomi as modified teaches wherein the link comprises an inlet port and an outlet port (Gomi #2).

Regarding Claim 8, Gomi as modified teaches wherein the inlet port is rotatably coupled to the exterior portion of the modular water flow system (Gomi #31 is rotably connected to element #18).

Regarding Claim 17, Gomi as modified teaches at least one pipe (Gomi #2) connected on each end by at least one connecting piece (Gomi #18 and #17)

Regarding Claim 20, Gomi as modified teaches that it can be swiveled (Gomi where element #18 and 8 meet).

Claims 13-15 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,080,304 to Gomi in view of U.S. Patent No. 5,054,424 to Sy as applied to claim 1 above, and further in view of U.S. Patent No. 6,125,791 to Gundersen et al.

Regarding Claims 13-15, Gomi as modified is silent on the at least one attachment includes at least one of a ball/socket assembly, wherein the ball/socket assembly comprises a number of interlocking balls and sockets that can be rotated in at least one direction to allow customizability in water flow pattern. However, Gundersen teaches an aquarium with a ball and socket assembly (Gundersen #62B, 65B, 62B and 64B). It would have been obvious to one of ordinary skill in the art to further modify the teachings of Gomi with the teachings of Gundersen at the time of the invention since the modification is merely the selection of a known alternate equivalent discharge attachment selected for the advantage of controlling the direction of the outflow for a particular aesthetic effect.

Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,080,304 to Gomi in view of U.S. Patent No. 5,054,424 to Sy as applied to claim 1 above, and further in view of U.S. Patent No. 6,659,043 to Huska et al.

Regarding Claim 16, Gomi as modified is silent on a spray bar. However, Huska teaches an aquarium spray bar (Huska #44). It would have been obvious to one of ordinary skill in the art to further modify the teachings of Gomi with the teachings of Huska at the time of the invention for the advantage of a larger discharge coverage are for a more uniform distribution through out the aquarium body.


Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent No. 5,807,480 (Fig. 1 and 11); U.S. Patent No. 4,301,767 (Fig. 1 #72); U.S. Patent No. 3,785,342; U.S. Patent No. 5,632,220; U.S. Patent No. 5,084,164; U.S. Patent Pub. No. US 2002/0185080; U.S. Patent No. 3,557,753; European Patent EP 0527580; European Patent EP 0616768; U.S. Patent No. 5,433,843 (element #18 Col. 8 line 7-15)

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrea M. Valenti whose telephone number is 703-305-3010. The examiner can normally be reached on 7:30am-5pm M-F; Alternating Fridays Off. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter M. Poon can be reached on 703-308-2574. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Andrea M. Valenti
Patent Examiner
Art Unit 3643

09 March 2005

